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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/775,554

02/09/2004

Meng Yang

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06/04/2009

MORRISON & FOERSTER LLP

12531 HIGH BLUFF DRIVE

SUITE 100

SAN DIEGO, CA 92130-2040

EXAMINER

WEHBE, ANNE MARIE SABRINA

ART UNIT

PAPER NUMBER

1633

MAIL DATE

DELIVERY MODE

06/04/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/775,554

**Applicant(s)**

YANG ET AL.

**Examiner**

Anne Marie S. Wehbe

**Art Unit**

1633

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/22/09.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

A request for continued examination (RCE) under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/22/09 has been entered. Applicant's request for consideration of the after-final amendment filed on 3/23/09 is acknowledged. No claims have been amended, canceled, or added. Claims 1-3 and 19-20 are pending in the instant application. Of these, claims 19-20 remain withdrawn from prosecution as being drawn to subject matter nonelected without traverse. Claims 1-3 are currently under consideration. An action on the merits follows.

Those sections of Title 35, US code, not included in this action can be found in a previous office action.

### ***Claim Rejections - 35 USC § 103***

The rejection of claims 1-3 under 35 U.S.C. 103(a) as being unpatentable over WO 02/28188 A1 (4/1/02), hereafter referred to as Kern, in view of Okabe et al. (1997) FEBS Lett., Vol. 467, 313-319 is maintained. Applicant's arguments have been fully considered, including the Yang et al. reference, but have not been found persuasive in overcoming the rejection of record.

With the exception of remarks regarding the teachings of Yang et al., applicant's arguments were fully considered in the Advisory Action mailed on 4/16/09. Portions of the advisory action are reiterated below for clarity.

The applicant argues that Kern et al. does not teach constitutive expression of GFP. This is not agreed. Page 13, paragraph 1, clearly teaches the constitutive expression of GFP. While the purpose of constitutive expression of GFP in a transgenic mouse discussed in this paragraph may be different from applicant's intended use, this is irrelevant as the patentability of the claimed product depends on its structure and not any particular intended use. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Further, whether or not an inducible promoter would suit the intended use of Kern et al. better than a constitutive promoter is likewise irrelevant as Kern et al. specifically teaches the embodiment of a transgenic animal where GFP is constitutively expressed (Kern et al., page 13, paragraph 1). A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including nonpreferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). See also *Celeritas Technologies Ltd. v. Rockwell International Corp.*, 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fed. Cir. 1998). Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971).

The applicant then argues that the successful production of an immunodeficient mouse that stably expresses GFP in all tissues is a surprising and unexpected result since the expression of GFP could be toxic in the background of immunodeficiency. In response, as noted previously, the arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997). See MPEP 716.01(c). Examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration include statements regarding unexpected results, commercial success, solution of a long-felt need, inoperability of the prior art, invention before the date of the reference, and allegations that the author(s) of the prior art derived the disclosed subject matter from the applicant. MPEP 716.01(c). There is no evidence of record that expression of GFP would be any more toxic in an immunocompromised mouse than it would be in a immunocompetent mouse or that the skilled artisan at the time of filing would not have expected success in producing a transgenic GFP nu/nu mouse as taught by Kern et al. It has been noted in previous office actions that Kern et al. specifically teaches methods of making a mouse as claimed by stably integrating the detectable gene into the chromosome of a mouse embryonic stem cell and using the embryonic cell to develop strains of homozygous mice having two copies of the integrated construct in every cell, and then breeding the mice with nu/nu mice to produce mice that are homozygous for the transgene and homozygous for immunodeficiency. As noted previously, the guidance provided by Kern is in fact more detailed than that provided by the instant specification for making transgenic mice. As such, applicant's arguments are not found persuasive in overcoming the rejection of record.

Regarding Yang et al., the applicant argues that this post-filing publication by the instant inventors describes the GFP-expressing immunocompromised rodent claimed herein, and further demonstrates its stability and utility in cancer research, which the applicant maintains is unpredictable and unexpected. In response, Yang et al. does provide a reduction to practice of the claimed mouse. However, it is not agreed that such a reduction to practice is unexpected. As stated above, Kern et al. provides substantial guidance, more so than provided by the instant specification, for making a mouse as claimed by stably integrating the detectable gene into the chromosome of a mouse embryonic stem cell and using the embryonic cell to develop strains of homozygous mice having two copies of the integrated construct in every cell, and then breeding the mice with nu/nu mice to produce mice that are homozygous for the transgene and homozygous for immunodeficiency. Nothing in Yang et al. suggests that the skilled artisan would not have predicted success in making such a mouse or that the skilled artisan at the time of filing would have been concerned that expression of GFP in an immunocompromised mouse would be toxic. Further, it is noted that the mice disclosed by Yang et al. were in fact made by breeding the GFP transgenic mice taught by Okabe et al. with nu/nu mice. The combination of the teachings of Kern et al. and Okabe et al. as set forth in the rejection of record provides clear motivation to make just such a cross. As such, neither applicant's arguments nor the teachings of the post-filing Yang et al. reference overcomes the rejection of record.

No claims are allowed.

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Dr. A.M.S. Wehbé

*/Anne Marie S. Wehbé/*

Primary Examiner, A.U. 1633